IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Bruton, et al. Confirmation No.: 2267

Serial No.: 09/773,811 Group Art Unit: 2152

Filed: January 31, 2001 Examiner: Truong, Lan Dai T

For: **METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS FOR SELECTIVELY ALLOWING USERS OF A MULTI-USER SYSTEM ACCESS TO NETWORK RESOURCES**
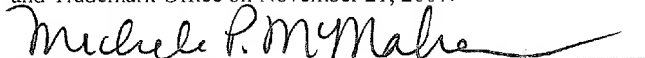
Date: November 21, 2007

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

> **CERTIFICATION OF TRANSMISSION**
> I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on November 21, 2007.
>
> *Michele P. McMahan*
> Michele P. McMahan

APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41

Sir:

This *Reply Brief* is filed in response to the *Examiner's Answer* mailed October 15, 2007. It is not believed that an extension of time and/or additional fee(s) are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. § 1.136(a). Any additional fees believed to be due may be charged to Deposit Account No. 09-0461.

Comments on the Claim Rejections in the Examiner's Answer

The grounds for rejection for the pending claims are set forth at pages 3-14 of the Examiner's Answer. Appellants note, however, that various of these rejections have undergone significant changes from the rejections that were presented to Appellants in the Final Action of March 20, 2007. In particular, the Final Action incorporated by reference the rejections set forth in the Office Action dated October 31, 2006, and indicated that the rejections in the October 31, 2006 Office Action were made final. However, a comparison of the rejections in the October 31, 2006 Office Action with the rejections set forth in the Examiner's Answer reveals significant

differences. By way of example, the rejection of Claim 1 set forth in the October 31, 2006 Office Action is set forth in less than **two pages** and cites to excerpts from **five columns** of Jacobson. In contrast, the rejection of Claim 1 set forth in the Examiner's Answer spans nearly **four pages** and cites to excerpts from **eight columns** of Jacobson. Thus, to the extent that the arguments in Appellants' Appeal Brief do not line up precisely with the rejections as set forth in the Examiner's Answer, this is because Appellants are facing a moving target with the Examiner improperly changing the rejections during the present appeal.

Despite the Examiner's efforts to rewrite the "final" rejections during the pendency of this appeal, Appellants wish to proceed forward to a decision on the merits. The present application has now been pending for nearly seven (7) years, and this is the second time that Appellants have taken the application on appeal (the final rejections at issue on the first appeal were withdrawn in response to a Pre-Appeal Request for Review). Thus, for the reasons provided in Appellants' Appeal Brief, as further reinforced by the arguments presented below, Appellants respectfully submit that all of the pending rejections should be reversed, and that the present application should be allowed at this time.

Response to Arguments in the Examiner's Answer

The remainder of the present reply brief responds to the arguments set forth in the Response to Arguments section of the Examiner's Answer. (*See* Examiner's Answer, Section 10, at 15-27). For the reasons discussed below, Appellants respectfully submit that the arguments contained in the Examiner's Answer fail to support the rejections of any of the pending claims as being unpatentable over U.S. Patent No. 5,548,649 to Jacobson ("Jacobson") in view of U.S. Patent No. 6,366,912 to Wallent et al. ("Wallent").

I.   Response to Arguments 10(a), 10(b) and 10(c)

Sections 10(a), 10(b) and 10(c) on pages 15-17 of the Examiner's Answer respond to Appellants' showing at Section II.A of the Appeal Brief that Jacobson does not disclose "identifying a security zone that is associated with the one of the plurality of resources" as is recited in Claims 1, 14 and 19. Appellants respond to each argument raised by the Examiner as

follows.

The Examiner first argues that Appellants have mischaracterized the language of Claims 1, 14 and 19 because those claims do not recite "identifying a security zone that is associated with a resource to which a message is to be sent." However, each of Claims 1, 14 and 19 expressly recite:

1) "receiving a request originated from a user of a multi-user system to transmit a message via the multi-user system over the network to **one of the plurality of resources**" and

2) "identifying a one of the plurality of security zones that is associated with **the one of the plurality of resources**."

Thus, Claims 1, 14 and 19 use antecedent basis (i.e., the term "**the** one of the plurality of security zones" in the second quote above is referring to the "one of the plurality of security zones" in the first quote above) to expressly require that "the one of the plurality of security zones" that is identified (see quote 2) be the "one of the plurality of resources" for which a request is received from a user to transmit a message to that one of the plurality of resources (see quote 1). Thus, contrary to the Examiner's argument, the claims do in fact expressly require the identification of a security zone that is associated with a resource to which a message is to be sent, and Appellants are clearly **not** reading a limitation from the specification into the claims. Instead, Appellants argument is based on the express recitations of Claims 1, 14 and 19, which the Examiner has ignored in both the rejections of these claims and in the Examiner's Answer.

The Examiner next argues that Jacobson discloses "identifying a security zone that is associated with a resource to which a message is to be sent," because Jacobson allegedly teaches that "each of the data packets include source address, destination address (column 1, lines 40-42) those [sic] are used to identifying [sic] the secure zones of 'the source devices and destination devices' those [sic] are shared functionality with 'resources'." (Examiner's Answer at 15). Appellants respectfully submit, however, that while source and destination addresses may identify locations in a network, neither the source nor destination addresses of Jacobson identify a security zone that is associated with a resource to which a message is to be sent. Moreover,

while the Examiner further cites to several additional columns of Jacobson as allegedly teaching the "identifying" recitation of Claims 1, 14, and 19, Appellants respectfully submit that a careful review of these sections of Jacobson reveals that they simply do not teach or disclose identifying a security zone that is associated with a resource to which a message is to be sent.

Finally, in Section 10(c) of the Examiner's Answer the Examiner purports to respond to Appellants' showing that Col. 6, lines 53-65 of Jacobson does not disclose a "method for using filter tables which included [sic] in the security zone bridge to identifying [sic] wherefrom (security zone hosts) the data packet sent from and whereto (secure zone hosts) the received data packets are processed to" as alleged in the Final Action. Notably, the Examiner does not even attempt to respond to Appellants detailed showing that none of the filter tables of Jacobson has anything to do with **identifying a security zone that is associated with a resource**. Instead, the Examiner's Answer merely states a desired conclusion – namely that a "source IP address comprised in data packet [is mapped] with IP addresses of secure zones in identification tables to determine if the data packet is authorized to be forwarded to other secure zone network." (Examiner's Answer at 16-17). The Examiner's Answer, however, does not even attempt to specifically explain where or how Jacobson teaches what the Examiner's Answer claims; instead the Examiner's Answer provides a four line string cite to **seven different columns and six different figures** of Jacobson which fail to provide any support for the "conclusion" stated in the Examiner's Answer.

Thus, for each of the above reasons, Appellants respectfully submit that Sections 10(a) through 10(c) of the Examiner's Answer fail to rebut Appellants' showing that Jacobson does not disclose identifying a security zone that is associated with a resource to which a message is to be sent as is recited in Claims 1, 14 and 19.

II.   Response to Argument 10(d)

Section 10(d) on page 17 of the Examiner's Answer responds to Appellants' showing that Jacobson does not disclose "determining if the user of the multi-user system is authorized access to the identified one of the plurality of security zones" as recited in Claims 1, 14 and 19. (*See*

Appeal Brief at Section II.B). Appellants respectfully submit that the six columns of Jacobson which are cited in support of the examiner's argument simply do not disclose what the Examiner's Answer claims these columns disclose. Appellants further note that Appellants' Appeal Brief explains in detail why the various tables of Jacobson relied upon in the rejections of Claims 1, 14 and 19 as allegedly being used to determine if a user of the multi-user system is authorized access to an identified one of the plurality of security zones do no such thing. Thus, the rejections of Claims 1, 14 and 19 should be reversed for the separate and independent reason that Jacobson does not disclose "determining if the user of the multi-user system is authorized access to the identified one of the plurality of security zones."

III.   Response to Arguments 10(e) and 10(f)

Sections 10(e) and 10(f) on pages 17-19 of the Examiner's Answer respond to Appellants' showing that Jacobson does not disclose "forwarding the message from the multi-user system over the network only if it is determined that the user is authorized access to the identified one of the plurality of security zones" as recited in the last clause of the body of Claims 1, 14 and 19. (*See* Appeal Brief at Section II.C). In the October 31, 2006 Office Action, which is incorporated by reference in the Final Action as setting forth the basis for the final rejections, the Examiner took the position that the discussion of the "authorized install/or view request" at Col. 7, lines 1-67, Col. 8, lines 1-48 and Col. 15, lines 1-15 of Jacobson discloses this recitation of Claim 1. (October 31, 2006 Office Action at 4). As this contention is thoroughly rebutted in Appellants' Appeal Brief, the Examiner has improperly **changed** the rejection in the Examiner's Answer. In particular, the Examiner now argues that the forwarder 211 of Jacobson determines authorization for source IP addresses which allegedly "shares functionality with user identification by associating/mapping/sparing the source IP addresses with IP addresses of secure zones in identification tables to determine if the source IP address is authorized." (Examiner's Answer at 18). The Examiner, however, does not provide any pinpoint cites to identify where any such teaching is located in Jacobson. Appellants respectfully submit that such pinpoint cites are lacking because Jacobson does not disclose what the Examiner contends. Instead, as discussed in

detail in Section II.B of Appellants' Appeal Brief, the "filter tables" and "identification tables" of Jacobson are used for different purposes (e.g., to filter based on protocol types or to determine whether encryption is necessary). Thus, the newly identified basis for the rejection set forth in the Examiner's Answer is equally unavailing.

Thus, for each of the above reasons, Appellants respectfully submit that the rejections of Claims 1, 7, 9, 14-17, 19-22 and 28 should be reversed.

IV.   Response to Argument 10(g)

In Section II of Appellants' Appeal Brief, Appellants identified several fatal deficiencies in the final rejection of Claim 24. Included in these deficiencies is the fact that neither the Office Action nor the Final Action explains where the last two clauses of the body of Claim 24 can be found in the cited art. In a belated effort to remedy this situation, the Examiner has now replaced the one line rejection of Claim 24 provided in the final rejection with a new 13 line rejection in the Examiner's Answer. (*Compare* October 31, 2006 Office Action at 4 *with* Examiner's Answer at 14). In any event, Appellants respectfully submit that Jacobson fails to disclose or suggest at least the "identifying", the "determining" and the "forwarding" recitations of Claim 24 for the same reasons that Jacobson does not disclose the corresponding recitations of Claims 1, 14 and 19. Accordingly, the rejection of Claim 24 should likewise be reversed.

V.   Response to Arguments 10(i) and 10(j)

In Section 10(i) of the Examiner's Answer, the Examiner first argues that Claim 25 does not recite "a first data structure to [sic] mapping the network resources to particular security zone" as suggested in Appellants' argument. This argument simply ignores the language of Claim 25 and the clear defects with the rejection of Claim 25 identified in the Appeal Brief. In particular, what Claim 25 recites is a "first data structure that specifies at least one security zone . . . that is associated with each of the plurality of networked resources." Thus, Claim 25 makes clear that the data structure associates (e.g., maps) each of the network resources to one or more security zones, and the Examiner's efforts to argue otherwise are unavailing.

The Examiner next argues that the Host ID table of Jacobson maps the IP address of host devices 102-3 through 102-7 to particular **security zones**, citing to Fig. 9 and Col. 7, lines 25-34 of Jacobson, and that these Host ID tables thus correspond to the "first data structure" of Claim 25. However, what the cited portions of Jacobson expressly state and show is that the Host ID tables map the host devices to a particular **security bridge** and do **not** associate or map networked resources to particular **security zones** as does the "first data structure" of Claim 25.

Finally, in Section 10(j) of the Examiner's Answer the Examiner responds to Appellants' showing that the "authorization table" of Figure 12 of Jacobson does not disclose or suggest the "second data structure" of Claim 25. (*See* Appeal Brief at Section III). The Examiner's **only** response to Appellants' showing is to argue that the second data structure of Claim 25 does not "specif[y] the respective security zone to which a user may have access." (Examiner's Answer at 21). However, contrary to the Examiner's assertion, what Claim 25 expressly recites is "a second data structure that specifies the respective security zones to which a plurality of users of the data processing device may have access." Thus, the Examiner has **failed to put forth any response whatsoever** to Appellants' showing that the "authorization table" of Figure 12 of Jacobson does not disclose or suggest the "second data structure" of Claim 25.

Thus, the rejection of Claim 25 should be reversed for each of the above reasons.

VI. Response to Arguments 10(k) and 10(l)

Sections 10(k) and 10(l) on pages 21-22 of the Examiner's Answer respond to Appellants' showing that the rejections of Claims 2-4 are internally inconsistent because the rejection of Claim 1 relies on the **bridges** 104-1 through 104-3 of Jacobson as comprising the multi-user system, whereas the rejection of Claims 2-4 (which depend from Claim 1), take the position that the **hosts** 102-1 through 102-12 of Jacobson comprise the "multi-user system." In response, the Examiner does not address, or even acknowledge, this inconsistency, but instead states that Jacobson discloses mainframe computers that are connected to terminals. As such, the Examiner's Answer also fails to rebut Appellants' showing regarding the patentability of Claims 2-4.

VII.   Response to Argument 10(m)

Section 10(m) on page 23 of the Examiner's Answer states that it responds to Appellants arguments regarding the rejections of Claims 3 and 4. It is unclear what argument this section is responding to, and hence no rebuttal is necessary.

VIII.   Response to Argument 10(n)

Section 10(n) on pages 23-24 of the Examiner's Answer responds to Appellants' showing that the Examiner has failed to provide any basis for rejecting Claims 5, 18 and 23. The Examiner concedes that Appellants argument is correct, and then attempts to show where the recitations of Claims 5, 18 and 23 can allegedly be found in the cited art. However, analysis of these newly asserted grounds for rejection show that the cited art fails to teach the recitations of Claims 5, 18 and 23.

For example, Claim 5 recites that "at least one entry in the data structure specifies the security zone associated with a group of the resources in the plurality of resources." The Examiner's Answer states that the "hosts" of Jacobson may be file servers, and hence it is inherent that the remote secure zone Host ID table includes at least one entry specifying the security zone associated with a group of resources. However, what Jacobson actually teaches is that the remote secure zone host ID table of Jacobson maps the IP address of host devices 102-3 through 102-7 to their corresponding security bridge 104-2 or 104-3. (Jacobson at Col. 7, lines 25-33 and Fig. 9). As such, the host ID table maps the host devices to a particular **security bridge** as opposed to mapping networked resources to particular **security zones**. Thus, the cited portions of Jacobson clearly fail to disclose or suggest the first recitation of Claim 5.

Claim 5 further recites "identifying the one of the plurality of security zones associated with the one of the plurality of resources comprises identifying the security zone associated with the most specific entry in the data structure that includes the resource." While the Examiner's Answer alleges that large portions of Columns 3, 7, 8, 9, 10, 11 and 12 and Figs. 1 and 9 of Jacobson disclose this recitation of Claim 5, the Examiner's Answer does not even attempt to explain how the cited portions of Jacobson teach anything about "identifying the security zone

associated with the most specific entry in the data structure." Thus, Claim 5 is clearly independently patentable over the cited art for at least two reasons.

Claims 18 and 23 include similar recitations, and hence are patentable over the cited art for the same reasons that Claim 5 is patentable over the cited art.

IX.   Response to Argument 10(o)

Sections 10(o) on pages 24-25 of the Examiner's Answer purports to respond to Appellants' argument that the Examiner has failed to show that "the identifying and determining steps are performed within the multi-user system" as recited in Claim 6. However, the totality of the Examiner's response is to state that these "techniques can also be applied in any environments e.g., mainframe computer." (Examiner's Answer at 24-25). This response simply does not address Appellants' showing that the rejection of Claim 6 is internally inconsistent.

X.   Response to Arguments 10(q) and 10(r)

Sections 10(p) and 10(r) on pages 25-26 of the Examiner's Answer purport to respond to Appellants' showing that Jacobson does not disclose "the first data structure comprises a mapping table that identifies the respective one of the plurality of security zones associated with each of the plurality of networked resources" and that "at least some of the entries in the mapping table are associated with multiple of the plurality of networked resources" as recited in Claim 26. Appellants note that the Examiner's response only addresses a portion of each of the two recitations of Claim 26 that Appellants have shown are not disclosed in Jacobson. In particular, the first of the above-quoted recitations states that the "the first data structure comprises a mapping table . . . ." The Examiner has simply ignored this portion of Claim 26, because the Host ID tables of Jacobson simply do not perform the mapping recited in Claim 26. Moreover, the Examiner simply rewrites the second clause of Claim 26 to state that the "tables include a plurality of entries" in order to argue that this recitation is taught by Jacobson. However, as clearly shown above, what Claim 26 in fact recites is that "at least some of the entries in the mapping table are associated with multiple of the plurality of networked resources." The

Examiner has not and cannot contend that Jacobson teaches or discloses this recitation of Claim 26.

XI. Response to Second Argument 10(r)

The second Sections 10(r) on pages 26-27 of the Examiner's Answer purports to respond to Appellants' showing that Jacobson does not disclose a mapping table that has entries which "include wildcard characters to specify multiple of the plurality of networked resources with a single entry in the mapping table" as recited in Claim 27. In particular, the Examiner argues that the entries of the table in Fig. 10 of Jacobson are "wildcard characters." As is well known to those of skill in the art, a "wildcard character" refers to a character that can represent any character. Nothing in Jacobson discloses or suggests using such characters. Thus, the Examiner's Answer also fails to rebut Appellants' showing that Claim 27 is independently patentable over the cited art.

XII. Conclusion

For each of the above reasons, Appellants respectfully submit that the pending claims are patentable over the cited art, and respectfully request the present application be passed to issuance.

Respectfully submitted,

D. Randal Ayers
Registration No. 40,493

USPTO Customer No. 46589
Myers Bigel Sibley & Sajovec
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: 919/854-1400
Facsimile: 919/854-1401